

REMARKS/ARGUMENTS

Claims 8-33 and 37-42 are pending. Claims 1-7 and 34-36 have been canceled. New Claims 37-42 have been added. No new matter has been introduced by the new claims.

As presented, all the pending claims of the subject application comply with all requirements of 35 U.S.C. Accordingly, Applicants request examination and allowance of all pending claims.

Office Action Summary

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lebizay et al. (US Patent No. 5,602,841) in view of Lo et al. (US Patent No. 6,785,236) further in view of Turner et al. (US Patent No. 6,907,041). Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lebizay in view of Lo, further in view of Patrick (US Patent Publication No. 2005/0175014). Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lebizay in view of Lo, Turner, and Patrick, further in view of Mahalingaiah (US Patent No. 6,788,701). Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lebizay in view of Lo and Turner, further in view of Fishman et al. (US Patent No. 6,084,869). Claims 8, 9, 15, 18, 19, 25, 28, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park (US Patent No. 6,430,187) in view of Lo. Claims 10, 11, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park in view of Lo, further in view of Yoshikawa et al. (US Patent No. 6,532,234). Claims 12 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park in view of Lo and Yoshikawa, further in view of Fishman. Claims 13, 14, 16, 17, 23, 24, 26, 27, 29, and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park in view of Lo and Yoshikawa, further in view of Patrick. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lebizay in view of Lo, further in view of Soumiya (US Patent No. 5,818,818).

Claim Rejections - 35 U.S.C. 103(a)

Claims 8-33

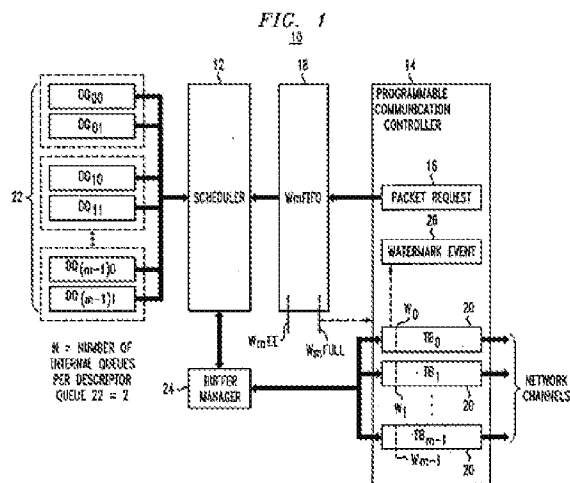
Independent Claims 8, 18, and 28 were rejected under 35 U.S.C. 103(a) as being unpatentable over Park in view of Lo. This is respectfully traversed.

Claims 8, 18, and 28 recite, in part:

"the fixed buffer allocation space is associated with a fixed buffer allocation queue identification, wherein the fixed buffer allocation space is associated with a first discard scheme"

On page 8 of the Office Action, the Examiner suggests that Lo discloses the above recited features of Claims 8, 18, and 28. This is respectfully traversed. Lo merely teaches a packet scheduler that dequeues packet descriptors from descriptor queues. Such a packet scheduler is not a discard scheme as recited in Claims 8, 18, and 28.

FIG. 1 of Lo, which is reproduced below for the Examiner's convenience, illustrates a packet scheduling arrangement according to the invention of Lo. (Col. 3, lines 32-33). This figure illustrates descriptor queues 22 that are "arranged to receive incoming packet descriptors." (Col. 4, lines 1-5). The packet descriptors are held in descriptor queues 22 until the occupancy of a transmit buffer 20 on a corresponding channel falls below a threshold level, at which time "a water mark event signal identifying the channel associated with the buffer is provided to the [packet] scheduler." (Col. 2, line 67 to col. 3, line 4). After receiving an event signal, the packet scheduler dequeues the highest priority packet descriptor from the descriptor queue 22, and the "information packets corresponding to the dequeued descriptors are then fetched and placed in the transmit buffer 20 for the given channel." (Col. 5, lines 12-14).



Thus, Lo teaches receiving incoming packet descriptors into descriptor queues, and then using a packet scheduler to dequeue high priority packet descriptors when the occupancy of a corresponding transmit buffer falls below a threshold level. The information packet corresponding to the dequeued descriptor is then placed in a transmit buffer for transmission over a given channel. Thus, the packet scheduler of Lo is involved in the transmission of packets between a descriptor queue and a transmission buffer. No where does Lo teach or suggest discarding packets. In fact, this process of transmitting packets is in opposition to discarding, or dropping, packets. Accordingly, Applicants respectfully submit that the scheduler of Lo is not a discard scheme as recited in Claims 8, 18, and 28.

Further, Claims 8, 18, and 28 were amended in the prior Response mailed on July 17, 2006 to recite that the first discard scheme "determines if the traffic will be accepted into the buffer." This amendment further clarifies the distinction with Lo since the packet scheduler of Lo does not determine "if the traffic will be accepted into the buffer." Rather, the packet scheduler of Lo merely responds to event signals and dequeues packet descriptors. For at least these reasons, Applicants respectfully assert that the combination of Park and Lo fails to teach or suggest all of the elements of Claims 8, 18, and 28. Claims 8, 18, and 28 are thus patentable over the combination of Park and Lo.

Claims 9-17, 19-27, and 29-33, which depend from Claims 8, 18, and 28 respectively, are in condition for allowance for at least the same reasons discussed above in relation to Claims 8, 18, and 28, as well as for the additional elements they recite.

New Claims 37-43

New independent Claim 37 recites, in part:

"allocating unreserved buffers in the prioritized fair share buffer space for the first group of network connections, wherein network connections in the first group of network connections associated with higher priority prioritized fair share queue identifications have access to a greater portion of the unreserved buffers in the prioritized fair share buffer space than network connections in the first group of network connections associated with lower priority prioritized fair share queue identifications"

Applicants respectfully assert that neither Park, Lo, nor any of the other references cited by the Examiner teach or suggest the elements of new Claim 37, including the above recited elements. For at least this reason, Claim 37 and its dependents are in condition for allowance.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

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